

**ANADARKO PETROLEUM CORP - EBUS  
DO NOT MAIL - PO BOX 4995  
THE WOODLANDS, Texas**

NRC 27C-4HZ

**Majors 42**

## **Post Job Summary** **Cement Surface Casing**

Date Prepared: 7/30/2014  
Version: 1

Service Supervisor: WHIPPLE, WESLEY

Submitted by: LANSDALE, JUSTIN

**HALLIBURTON**

## ***Pumping Schedule***

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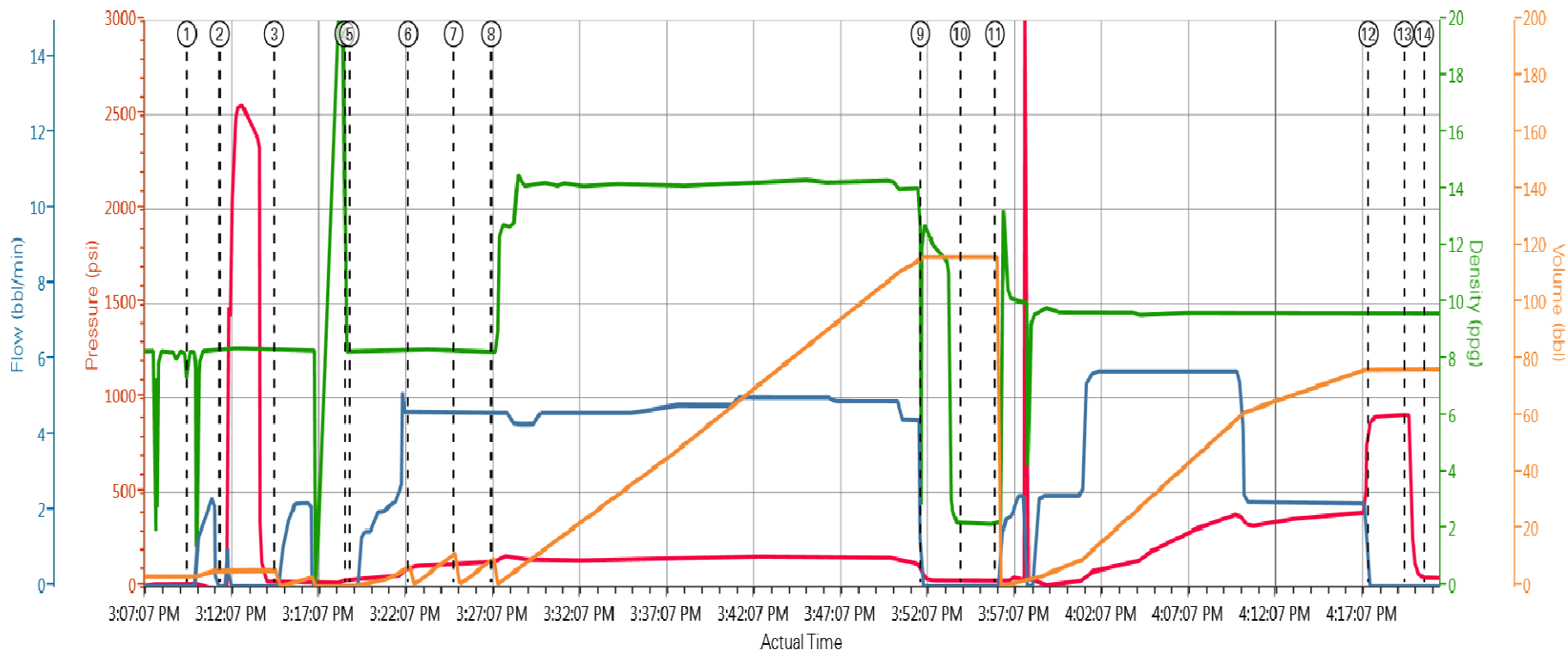
Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume
1	1	Spacer	Mud Flush	8.50	4.5	12.0 bbl
1	2	Cement Slurry	SwiftCem B2	14.20	5	380.0 sacks
1	3	DISPLACEMENT	Water	8.33	5.5	79 bbl



# HALLIBURTON

## Data Acquisition

### ANADARKO NRC 27C-4HZ SURFACE



PS Pump Press (psi)    DH Density (ppg)    Comb Pump Rate (bbl/min)    Pump Stg Tot (bbl)

① Start Job 11;8.34;0;3.6	④ Start Job 36;8.33;0;0	⑦ Pump Spacer 1 121;8.31;4.6;12.1	⑩ Drop Top Plug 32;2.21;0;116.3	⑬ Other 909;9.68;0;76.8
② Test Lines -10;8.35;0;5.6	⑤ Pump Spacer 1 137;8.31;0;0	⑧ Pump Lead Cement 131;8.27;4.6;10	⑪ Pump Displacement 32;2.27;0;0	⑭ End Job 45;9.63;0;76.8
③ Pump Spacer 1 20;8.32;0;0	⑥ Pump Spacer 2 102;8.36;4.6;7.2	⑨ Shutdown 57;12.79;0;116.3	⑫ Bump Plug 882;9.65;0;76.8	

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
03/09/2014 09:00		Call Out						Crew called out by ARS office at 0900 and requested on location at 1300
03/09/2014 12:30		Crew Leave Yard						Crew pre-tripped all equipment in yard to ensure in working quality, held a pre-journey safety meeting to discuss route being traveled, traffic and road condition and potential hazards that could occur while driving. All drivers fit for duty
03/09/2014 12:50		Arrive At Loc						Arrived on location, met with Anadarko Company Rep to discuss job details.
03/09/2014 13:00		Rig-Up Equipment						Crew performed a site assesment and hazard hunt, discussed rig up process and commenced rig up of all equipment
03/09/2014 13:30		Rig-Up Completed						Rig up of equipment complete
03/09/2014 14:00		Casing on Bottom						Rig landed casing on bottom and began circulating
03/09/2014 14:30		Safety Meeting						Held a pre-job safety meeting with all hands on location to discuss job process, procedures, and potential hazards that could occur while pumping.
03/09/2014 15:07		Start Job						Start Job
03/09/2014 15:09		Test Lines					2500.0	Pressure test pumps and lines to 2500 psi. Found no leaks in iron and pressure held
03/09/2014 15:12		Pump Spacer 1	4.5	10			90.0	Pump Fresh water spacer
03/09/2014 15:20		Pump Spacer 2	4.5	12			120.0	Mix Mud Flush with Fresh water for spacer
03/09/2014 15:23		Pump Spacer 1	4.5	10			140.0	Pump Fresh water spacer
03/09/2014 15:25		Pump Cement	5	105			150.0	Mix and pump 380 sks of SwiftCem @ 14.2ppg / 1.54 yield / 7.66 Gal/sk. Density verified by pressurized mud scales
03/09/2014 15:50		Shutdown						Shutdown to wash Cement mixing system
03/09/2014 15:52		Drop Top Plug						Drop top plug from HES plug container. Witnessed by Anadarko Company Rep and HES supervisor.
03/09/2014 15:54		Pump Displacement	5.5	79			370.0	Pump Fresh water displacement. Recieved Mud Flush to surface at 40 bbls into displacement. Recieved Cement at 60 bbls into displacement
03/09/2014 16:16		Bump Plug						Bumped plug 500 psi over final pumping pressure. Held pressure at 920 psi
03/09/2014 16:18		Check Floats						Released pressure back to pump truck, recieved 2bbls back and floats did hold
03/09/2014 16:19		End Job						End job.
03/09/2014 16:20		Rig-Down Equipment						Commence rig-down of all equipment. Wet and Dry cement samples were left on location with Anadarko Company Rep.
03/09/2014 17:00		Crew Leave Location						Crew held pre-journey safety meeting to discuss route being traveled, traffic, road conditions and potential hazards that could occur while driving. All drivers fit for duty.

### The Road to Excellence Starts with Safety

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3358656		<b>Quote #:</b>		<b>Sales Order #:</b> 901175059	
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> Porter, Bob			
<b>Well Name:</b> NRC			<b>Well #:</b> 27C-4HZ		<b>API/UWI #:</b> 05-123-38997		
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> IONE		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Contractor:</b> Majors			<b>Rig/Platform Name/Num:</b> Majors 42				
<b>Job Purpose:</b> Cement Surface Casing							
<b>Well Type:</b> Development Well				<b>Job Type:</b> Cement Surface Casing			
<b>Sales Person:</b> GREGORY, JON			<b>Srv Supervisor:</b> WHIPPLE, WESLEY			<b>MBU ID Emp #:</b> 518611	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BROOM, KENDALL L	4.2	524682	KOSAKEWICH, LUKE Wayne	4.2	560003	WHIPPLE, WESLEY Morgan	4.2	518611

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10822531C	10 mile	11410470C	10 mile	11605599	10 mile	11633846C	10 mile

### Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Water Depth	Perforation Depth (MD)	From	To
				BHST	1066. ft				
					Job Depth TVD	1060. ft			
					Wk Ht Above Floor	3. ft			

### Job Times

Called Out	Date	Time	Time Zone
	09 - Mar - 2014	09:00	MST
On Location	09 - Mar - 2014	12:50	MST
Job Started	09 - Mar - 2014	15:07	MST
Job Completed	09 - Mar - 2014	16:19	MST
Departed Loc	09 - Mar - 2014	17:00	MST

### Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
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### Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	20	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	20	MI		
KIT,HALL WELD-A	1	EA		
CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375	8	EA		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	1	EA		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
COLLAR-STOP-9 5/8"-FRICTION-HINGED	2	EA		

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Mud Flush		12.00	bbl	8.5				
	3.33 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
	0 gal/bbl	FRESH WATER							
2	SwiftCem B2	SWIFTCEN (TM) SYSTEM (452990)	380.0	sacks	14.2	1.54	7.66		7.66
	7.66 Gal	FRESH WATER							
The Information Stated Herein Is Correct				Customer Representative Signature					

